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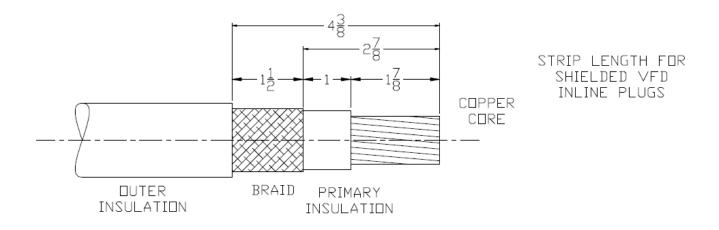
## Installation Instructions for VFD-1 Series Connectors

## Female Cable End Assembly

The cable end assembly is shipped complete in the box. The position of all components must be noted when the unit is disassembled for installation. The cable end assembly steps must be followed precisely.

NOTE: All drawings and photographs in this document assume that the bare end of the cable is to the right! Reverse the orientation of the drawings if you are assembling the connector on a cable with the bare end to the left!

1. Begin with stripping the cable as shown:



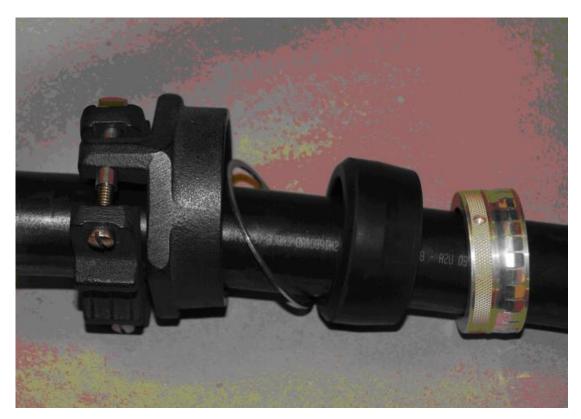
The outer jacket is stripped back from the end a length of 4 3/8 inches (111 mm) The braid shield is stripped back from the end a length of 2 7/8 inches (73 mm) The inner insulation is stripped back from the end a length of 1 7/8 inches (48 mm)

2. Crimp the contact onto the cable end using a hexagonal die style crimp. NOTE: universal style crimpers may deform the contact and prevent successful assembly of the connector. Use only the approved hexagonal die style crimp tools.

Crimping Die Information

13642PF		
Cable Size MCM	Hydraulic Die Cat. No.	Head Die Code
313	17744	76H
444	17748	99H
535	17749	106H
646	17753	115H
777	17753	115H
Thomas & Betts TBM15I (replaces TBM15PF)		
Thomas & Betts TF	3M15I (replaces TBM15PF)	
	•••	Head Die Code
Thomas & Betts TE Cable Size MCM 313	BM15I (replaces TBM15PF) Head Die Cat. No. 15512	Head Die Code 76H
Cable Size MCM	Head Die Cat. No.	
Cable Size MCM 313	Head Die Cat. No. 15512	76H
Cable Size MCM 313 444	Head Die Cat. No. 15512 15505	76H 99H

3. The following components must be placed onto the cable before installing the rear contact retaining ring:



First the threaded clamp assembly, second the thrust washer, third the rubber grommet, and finally the silver ring from the braid trap. Ensure parts are oriented as shown in the photograph.

4. Slide black section of braid trap onto cable and place braid over the tapered end of the black section. Ensure that the braid is placed under the silver ring and over the lip of the black ring. Turn only the knurled ring on the black section to tighten the assembly onto the cable braid. DO NOT allow the silver ring to turn relative to the cable!!



IMPORTANT: Engage the threads on the silver ring and the black ring and turn only the knurled ring on the black part to tighten. Be careful to not twist the cable braid.



- 5. Install the rear (inside) snap ring onto the female contact using the appropriate RigPower tools.
  - First mount the snap ring onto the tool (T-2081-4) using snap ring pliers. Note that T-2081-4 is the longer of the two tools.



- Slide the tool onto the contact until it bottoms out
- Then use the tool pusher ring (T-2081-2) to slide snap ring into place.
- 6. Slide the contact, cable and cable braid trap assembly into the cable adapter. NOTE: DO NOT rotate the cable adapter relative to the braid trap assembly!



7. Install the chain loop for the safety cap onto the cable adapter.



- 8. Slide the retaining nut onto the cable adapter.
- 9.



## 10. Install the front plug shell over the contact. NOTE: THIS ASSEMBLY IS LEFT HAND THREADED!

IMPORTANT: Turn the front plug shell while holding the cable adapter still – DO NOT rotate the cable adapter relative to the cable as this will destroy the braid shield connection! The cap may be used for additional leverage to turn the front plug shell.



When the front plug shell is firmly screwed into position, install the front retaining washer and snap ring on the contact using the supplied tools.

- 11. Install the front (outside) snap ring onto the female contact using the appropriate RigPower tools.
  - First mount the snap ring onto the tool (T-2081-3) using snap ring pliers. Note that T-2081-3 is the longer of the two tools.



- Slide the tool onto the contact until it bottoms out
- Then use the tool pusher ring (T-2081-2) to slide snap ring into place.

The final step is to install the rubber washer, sealing washer, and threaded clamp assembly at the rear of the connector. IMPORTANT: Turn the threaded clamp nut while holding the

cable adapter still – DO NOT rotate the cable adapter relative to the cable as this will destroy the braid shield connection!



Should you need technical assistance, please call RigPower, LLC at 1-225-272-8800 Monday thru Friday from 8:00 AM to 4:30 PM Central Standard Time.